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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/729,103      | 12/05/2000  | Kenzi Suzuki         | 200538US0           | 6416             |

22850 7590 06/10/2003

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ALEXANDRIA, VA 22314

EXAMINER

MEDINA SANABRIA, MARIBEL

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1754

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

13

# Office Action Summary

Application No.

09/729,103

Applicant(s)

SUZUKI ET AL.

Examiner

Maribel Medina

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent No. 4,666,945 (Osugi et al).

Osugi et al discloses a method for producing a CuZnAlZr oxide catalyst, comprising the steps of: (a) adding a suitable precipitating agent to a mixed aqueous solution of water soluble copper-, zinc-, zirconium-, and aluminum- compounds to coprecipitate a mixture of water insoluble copper-, zinc-, zirconium-, and aluminum- compounds (See col. 3, lines 15-20; col. 4, lines 63-68; and col. 5, lines 1-2); (b) producing a precipitate (See col. 3, lines 20-30); (c) separating by filtration (see col. 4, lines 51-55) ; (d) washing (see col. 4, lines 51-55); (e) drying(see col. 4, lines 51-55); and (f) calcining (see col. 5, lines 64-68). The water soluble copper compound may be cupric nitrate (See col. 3, lines 55-56); the water soluble zinc compound may be zinc nitrate (See col. 3, line 63), the water soluble zirconium compound may be zirconium oxynitrate (see col. 4, lines 1-2), and the water soluble aluminum compound may be aluminum nitrate (see col. 5, line 11). The precipitating agent includes sodium carbonate and sodium hydroxide (See col. 4, lines 19-33).

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In regards to claim 2 the limitation “ $(\text{Cu} + \text{Zn})/(\text{Al} + \text{Zr}) = 2 \text{ to } 4$ ” is provided by Table 1 Examples 5, 6, 7, 9, 10, and 11 which include the molecular ratio of the components before preparing the catalyst.

In regards to claims 3, Osugi et al clearly discloses the catalyst made by the process of claims 1 and 2.

Therefore no difference is seen between the instantly claimed invention and Osugi et al.

### **Response to Arguments**

3. Applicant's arguments filed 4/14/03 have been fully considered but they are not persuasive. Applicant's argue that “The reference teaches a catalyst for producing methanol by reacting carbon monoxide and/or carbon dioxide with hydrogen in a vapor phase, however, does not teach a catalyst having activity of converting methanol to hydrogen gas containing no CO at al, or containing very little OC by oxidative reforming reaction.”

This argument is not persuasive, since although the newly added limitation of claims 1 and 2, is not disclosed by Osugi et al, the property will be inherently provided by the catalyst of Osugi et al once the catalyst is used and produced as instantly claimed. See *In re Spada*, 911, F.2d 705, 709, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1990).


In response to applicant's arguments, the recitations “having activity of converting methanol to hydrogen gas containing almost no CO by oxidative steam reforming reaction wherein partial oxidation and steam reforming reaction are performed” and “having activity of converting methanol to hydrogen gas containing almost no CO by oxidative steam reforming reaction of methanol” have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites

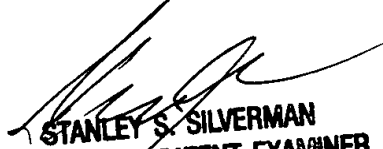
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the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

**Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner Maribel Medina. The examiner can normally be reached on Monday through Friday from 7:30 AM to 3:30 PM. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

**Examiner: Maribel Medina**   
**Tel: 703-305-1928**  
**Fax: 703-872-9310**  
**June 3, 2003**

  
**STANLEY S. SILVERMAN**  
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